

Fig. 67

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		Prognosis Total (+) vs (-)	Prognosis Total (homo)	Prognosis Total	Prognosis Total (+) Vs (-)	Prognosis Stomach	Prognosis Stomach	Prognosis Stomach	Prognosis Stomach	Prognosis Total (+) vs (-)	Prognosis Total (homo)	Prognosis Other cancers	Prognosis Other cancers	Treatment Effect Total (+) Vs (-) Total
12	aqp_27 AS aqp_21 DG			GG66.7				DG67.7				DD67.5	no adjuvant therapy D(-)>(+)	
24	aqp_10 AS aqp_9 IM			II80				II67.5.2				II100	no adjuvant therapy S(-)>(+)	
27	aqp_6 ST			TT66.7				ST67.7				SS87.5	no adjuvant therapy S(-)>(+)	
28	aqp_5 LPS			LL80. SS80				LL100				LS100. SS100	no adjuvant therapy L(-)>(+)	
29	aqp_4 LV			VV66.9				LV67.7				LL87.5	no adjuvant therapy L(-)>(+)	
36	aqp3 PS	3P=3S=9L =37D		PS66				PS69.4				PS66.3		
41	aqp9 FLY		Y(+)>(-)	Yhetero(-)	LY71.60			LY720	Y(+)>(-)	Yhetero(-)	LY70.80	no adjuvant therapy Y(+)>(-) immunotherapy Y(+)>(-)		
45	aqp13 AG			AA67				AG68.4				AA65.3		
46	aqp14 LM	L=M		LM70.1				LM72.4				LL70		
55	aqp23 LR	L=R		LR67.4				RR68.1	R(+)>(-)	Lhetero (-) L-homo Rhetero no mo(-)	LR67.20			
60	aqp26 GLY aqp28 ST	28S=28T= 30S=37I=4 6V=46E=4 7F=47Y=5 2P=52L=6 SL		ST68.2				ST77.8				TT63.4		
62	aqp30 HSY			SY75				HS100				SY100	immunotherapy H(+)>(-)	
69	aqp37 DIV			DY66				IV63.3				DY65.3		

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		Equivalence	Prognosis		Prognosis		Prognosis		Prognosis		Prognosis		Prognosis		Prognosis		Treatment Effect	
			Total (+)	Total (-)	Total (homo)	Total (+)	Total (-)	Total (homo)	Total (+)	Total (-)	Total (homo)	Total (+)	Total (-)	Total (homo)	Total (+)	Total (-)		
70	aqp38	AV	A=V		V63.4			V71.7			AV64.7			EG64.2				
77	aqp45	EG	E=G		EG67			EG68.6						EG64.2				
78	aqp46	EV	E=V		EV68.2			EV77.8			V63.4			V63.4				
79	aqp47	FV	F=V		FV68.2			FV77.8			Y63.4			Y63.4				
84	aqp52	LPS	52P=52L		LP68.2			LP77.8			PP63.4			PP63.4				
85	aqp53	LQ	L=Q		QQ68.5			LQ68.5			QQ64.9			PR68.3				
87	aqp55	LP	55P=55R		LP1000			LR750			LP68.4			LP68.3				
88	aqp56	LP	L=P		LP67.20			LP68.4			P(+)=(-)			LP68.3				
89	aqp57	ADSV			AA64.70			AS100			SV80							
98	aqp66	DE	66D=66E=67=66V	E(+)=(-)	DE70.1	E(+)=(-)		DE77.00	E(+)=(-)		DE670							
					Dhetero(-)-phomo, hetero>homo>(-)	Dhetero(-)-phomo, hetero>homo>(-)		Dhetero(-)-phomo, hetero>homo>(-)	Dhetero(-)-phomo, hetero>homo>(-)		Dhetero(-)-phomo, hetero>homo>(-)							
99	aqp67	IV	I=V	V(+)=(-)	IV70.10	V(+)=(-)		IV720	V(+)=(-)		IV670							
					Dhetero(-)-phomo, hetero>homo>(-)	Dhetero(-)-phomo, hetero>homo>(-)		Dhetero(-)-phomo, hetero>homo>(-)	Dhetero(-)-phomo, hetero>homo>(-)		Dhetero(-)-phomo, hetero>homo>(-)							
102	aqp70	EGR			GG68.10			GR69.6			GG72.70							
103	aqp71	ADKT			AK1000			K183.3			AA700							
106	aqp74	AES			AS660			AE83.3			AS100							
107	aqp75	LV			LV69.6			LV71.5			LV66.4							
109	aqp77	RT			RT68.7			RT72.4			RR82.7							
116	aqp84	EQ			EE66.5			EO68.5			EE64.9							
117	aqp85	LV			VV66.5			LV68.5			VV64.9							
118	aqp86	AEQ			AG67.8			EG76.1			AG80.90							

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Fig. 69

		Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis	Prognosis
		Equivalence	Total (+)	Total (norm)	Total (+) vs (-)	Stomach	Stomach	Stomach	Other cancers	Other cancers
			vs (-)	Total	Stomach	Stomach	Stomach	Stomach	Other cancers	Other cancers
			Total	Total	Total	Total	Total	Total	Total	Total
199	aqp87	FLY		FY72.1		LY72.1		FY75.90	Immunotherapy	
121	aqp89	GI		GG66.5		GI68.5		GG64.9		
122	aqp90	IT		II66.5		II68.5		II64.9		
148	aqp116	IV								
157	aqp125	AGS		GS74.4		GS75.3		GS72.5		
158	aqp128	HQ		HQ71.4		QQ67.9		HQ71.5		
162	aqp130	QR		QR66.9		RR68.2		QR67.2	Immunotherapy	
172	aqp140	AT		AA66.4		AT68.4		AA64.1		
199	aqp167	HR		HH67		HR68.4		HH65.3		
214	aqp182	NS		SS68.4		NS68.4		SS64.1		
217	aqp185	IT		II67.8		II69.4		II65		
229	aqp197	NS		NS68		NS69.4		NS66.3		
235	aqp203	IV		IV67.5		IV70.7		VV66.9		
252	aqp220	HR		RR66.5		HR68.5		RR64.9		
253	aqp221	HQ		QQ66.5		HQ68.5		QQ64.9		
255	aqp224	QR		QR70.1		QR72.4		RR70		
	All survived		DO71AKD		DO74AS(3)					

Fig. 70

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		Treatment Effect		Treatment Effect		Treatment Effect		Treatment Effect		Treatment Effect	
		Total (homo)	All cases	Total (+) Vs (-)	Stomach	Stomach	Stomach cancer	Total (+) Vs (-)	Other cancers	Other cancers	Other cancers
DG	Diversity	Total									
app_27	AS	no adjuvant therapy D(-) phetero (homo) no adjuvant therapy	no adjuvant therapy CG67.8	no adjuvant therapy D(-)>P(+)							
app_21	DG	Chomo-phetero((-))									
app_10	AS										
app_9	IM	no adjuvant therapy S(-) phetero (homo) no adjuvant therapy	no adjuvant therapy TT87.5	NIS S(-)>P(+)	no adjuvant therapy S(-) phetero (homo) no adjuvant therapy	no adjuvant therapy TT92.6					
app_6	ST	Thomo-phetero((-))									
app_5	LPS	no adjuvant therapy Phomo-phetero((-))	Immunotherapy PP62	no adjuvant therapy LI->P(+)	no adjuvant therapy Lhetero>(-) no adjuvant therapy Phomo-phetero((-))	no adjuvant therapy PP92.6	no adjuvant therapy LI->P(+)				
app_4	LV	no adjuvant therapy LI- phetero (homo) no adjuvant therapy	no adjuvant therapy VV87.8	no adjuvant therapy LI->P(+)	no adjuvant therapy NI- phetero (homo) no adjuvant therapy	no adjuvant therapy VV92.6					
app_3	PS	Vhomo-phetero((-))	no adjuvant therapy SS(78)								
app_9	FLY	no adjuvant therapy Yhetero (homo)>(-) Immunotherapy Yhetero (homo)>(-)	Chemotherapy LY(64.5) Immunotherapy YY (63.8)	Immunotherapy Y(+)>P(-)	Immunotherapy Y(62.9)	no adjuvant therapy Y(+)>P(-) Chemotherapy Y(+)>P(-)	Immunotherapy Fhetero (-)>homo no adjuvant therapy Yhetero (homo)>(-) Chemotherapy Yhetero (homo)>(-)	no adjuvant therapy LY(75.1) Chemotherapy LY (65.8) Immunotherapy LY (68.1)			
app_13	AG										
app_14	LM										
app_23	LR										
app_26	GLY										
app_28	ST										
app_30	HSY	Immunotherapy Phetero>(-) (homo Immunotherapy Yhetero>(-))homo	Immunotherapy HY(69.6)		Immunotherapy Phetero>(-) (homo Immunotherapy Yhetero>(-))homo	Immunotherapy HY(65.2)					
app_37	DY		no adjuvant therapy YY(78.2), Chemotherapy DY(62.5)				no adjuvant therapy Y(+)>P(-)	no adjuvant therapy D(-) phetero-homo no adjuvant therapy Dhomo, hetero>(-)	no adjuvant therapy YY (69.7)		

Fig. 71

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	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect
	Total (homo)	All cases	Total (+) Vs (-)	Total (homo)	Stomach cancer	Total (+) Vs (-)	Total (homo)	Other cancers
OC	Diversity	Total				Other cancers		
app38	AV			Chemotherapy Atheleo(-)homo, Chemotherapy Vheteo(-)homo	Chemotherapy AV(65.2) (+)(-)	Chemotherapy A V(-)heteo>homo, no adjuvant therapy Atheleo heteo(-)	no adjuvant therapy AV(71.3)	
app45	EG							
app46	EV							
app47	FV							
app52	LPS							
app53	LQ							
app55	LPR							
app56	LP							
app57	ADSV	Immunotherapy Athomo (all survived)>(-) (-), heteo	Immunotherapy AA (100)	Immunotherapy Vheteo(-)homo	Immunotherapy AA(100)			
app56	DE	no adjuvant therapy Dheteo(-))homo, Chemotherapy Dheteo(-))homo, Immunotherapy Dheteo(-))homo, no adjuvant therapy Eheteo(-)homo, Chemotherapy Eheteo(-)homo, Immunotherapy Eheteo(-)homo, Immunotherapy Eheteo(-)homo, Immunotherapy	no adjuvant therapy EE(77.7), Chemotherapy DE(62.1) Immunotherapy EE(60.3)	Chemotherapy Dheteo(-)homo, Chemotherapy Eheteo(-)homo	Chemotherapy DE(65.1)	Chemotherapy Dheteo(-)homo, Chemotherapy Eheteo(-)homo	Chemotherapy DE(59.1)	
app67	IV	no adjuvant therapy Iheteo(-)homo, Immunotherapy Iheteo(-)homo, Immunotherapy Iheteo(-)homo, no adjuvant therapy Vheteo(-)homo, Chemotherapy Vheteo(-)homo, Immunotherapy Vheteo(-)homo	no adjuvant therapy IV(79.6), Chemotherapy DE(62.1) Immunotherapy EE(60.3)	Chemotherapy Iheteo(-)homo, Chemotherapy Vheteo(-)homo	Chemotherapy IV(65.1)	Chemotherapy Iheteo(-)homo, Chemotherapy Vheteo(-)homo	Chemotherapy IV(59.1)	
app70	EGR							Chemotherapy IV(60.6)
app71	ADKT							no adjuvant therapy AD(41.7), Chemotherapy IT(59.9)
app74	AES							
app75	LV							
app77	RT							
app84	EO							
app85	LV							
app86	AEG	Immunotherapy Gheteo(-)homo	Immunotherapy EG(78.2)	Immunotherapy EG(+)(-)	Chemotherapy AA(70.6) Immunotherapy EG(80.6)		no adjuvant therapy Atheleo(-)homo	no adjuvant therapy AG(87.5)

Fig. 72

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	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect	Treatment Effect
	Total (homo)	All cases	Total (+) Vs (-)	Total (homo)	Stomach cancer Total (+) Vs (-)	Other cancers Total (homo)
DO	Diversity	Total	Stomach Effect Total (+) Vs (-)	Stomach Total (homo)	Other cancers Total (+) Vs (-)	Other cancers Total (homo)
aqp87	FLY	Immunotherapy hetero-homo (-)	no adjuvant therapy FY(82.3) Immunotherapy LY(71.2)	Immunother- apy F(-)+(-) p(homo) Chemotherapy Flomo-hetero (-)	Chemotherapy FF(61.3) Immunotherapy LY(68.1)	no adjuvant therapy Flhetero (-) YY(75)
aqp89	GT					
aqp90	IT					
aqp116	IV					
aqp125	AGS					no adjuvant therapy AS(73.7)
aqp126	HO					
aqp130	OR	Immunotherapy Chetero (-) p(homo) Immunotherapy Flhetero-homo (-)	Immunotherapy OR(75)			
aqp140	AT					
aqp167	HR					
aqp182	NS					
aqp185	IT					
aqp197	NS		no adjuvant therapy SS(76)		NIS SS(70)	no adjuvant therapy S(+)+(-) no adjuvant therapy NI- hetero-homo no adjuvant therapy Stomo hetero (-)
aqp203	IV					
aqp220	HR					
aqp221	HO					
aqp224	OR					
All survived						

Fig. 73

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		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp_27	AS					
aqp_21	DG					
aqp_10	AS					
aqp_9	IM					
aqp_6	ST					
aqp_5	LPS					
aqp_4	LV					
aqp_3	PS			#		
aqp9	FLY					
aqp13	AG					
aqp14	LM			LL100, LM23.20		
aqp23	LR					
aqp26	GLY					
aqp28	ST					
aqp30	HSY			#		
aqp37	DIY					#

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Fig. 74

		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp38	AV				#	#
aqp45	EG	EE50, GG19.4 O			AV24.1, VV15.6O	
aqp46	EV					
aqp47	FY					
aqp52	LPS					
aqp53	LQ	LQ26.4, QQ12.5O				
aqp55	LPR	PR29.7, LR0O				
aqp56	LP					
aqp57	ADSV					
aqp66	DE					
aqp67	IV					
aqp70	EGR					
aqp71	ADKT			#		
aqp74	AES					
aqp75	LV					
aqp77	RT			RR100, RT22.5 O		
aqp84	EQ	EQ26.4, EE12.5O				
aqp85	LV	LV26.4, VV12.5				
aqp86	AEG		GG94.4, EG82.8O			

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Fig. 75

		DQ	DQ	DQ	DQ	DQ
		Cancer in Family	Category	Metastases	Alcohol	Smoking
DQ	Diversity					
aqp87	FLY			YY50, LL20 O		
aqp89	GT	GT26.4, GG12.5				
aqp90	IT	IT26.4, II12.5				
aqp166	IV			II100, IV23.2		
aqp125	AGS			SS100, AA20 O		
aqp126	HQ					
aqp130	QR		#			
aqp140	AT	AT26.8, AA12.2 O				
aqp167	HR					
aqp182	NS	NS26.8, SS12.2 O				
aqp158	IT					
aqp197	NS			#		DI66.7, DD39.1 O
aqp203	IV	#		VV32, II22.2		
aqp220	HR	HR26.4, RR12.5 O				
aqp221	HQ	HQ26.4, QQ12.5 O				
aqp224	QR			RR100, QR23.2 O		
	All survived					

Fig. 76

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DR		Total			All cases Treatment Effect	Stomach Cancer Treatment Effect	Other cancers Treatment Effect
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers			
-16	3		agCGaGCG> agCGaGCU				
4	3						
12	5			Immunotherapy: KAAAKAAA>KAAGKAAG> KAAAKAAG	Immunotherapy: KAAAKAAA>KAAGKAAG> KAAAKAAG	no adjuvant therapy: KAAAKAAG>KAAGKAAG	
14	3						
19	2						
26	5						
28	4		hCACeGAA> hCACeGAG				
34	3					no adjuvant therapy: dCAAgCAA> gCAAgCAG	
53	2					no adjuvant therapy: dGACdGAU, dGAUdGAU>dGACdGAC, Chemotherapy: agCCaGCU>agCCaGCU, agCCaGCU>agCCaGCG	
57	7		dGACdGAU> dGAUdGAU				
58	6		eGAGaGCC> eGAGaGCU	no adjuvant therapy: agCCaGCG>agCUaGCU, Chemotherapy: agCUaGCU, agCCaGCG, agCCaGCU>agCCaGCU			
69	3					no adjuvant therapy: no adjuvant therapy: rCGCrCGG>rCGGrCGU Chemotherapy: rCGGrCGU, rCGGrCGG, rCGCrCGG>rCGCrCGC	
72	5		rCGGrCGG> rCGCrCGG	no adjuvant therapy: rCGCrCGG>rCGGrCGU			
78	3			Chemotherapy: yUACyUAC> yUAYyUAY		Chemotherapy:	
90	2						
93	2						

Fig. 77

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DR	Total			All cases Treatment Effect	Stomach Cancer Treatment Effect	Other cancers Treatment Effect
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers		
95	2					
101	2					no adjuvant therapy: VGUGUGUG, VGUAVGUG> VGUAVGUA
104	3	atGCAaGCC> atGCAaGCA				
106	2					
112	2					
117	2					
145	2					
152	2					
186	3			no adjuvant therapy: rCGGrCGG> rCGArCGA		no adjuvant therapy: rCGGrCGG, rCGArCGG> rCGArCGA
169	2					
179	2					
181	3			tACAmAUG> tAGCmaUG		
206	2					
217	2					

Fig. 78

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DR					
Nucleic Acid	No. of Diversity	Cancer in Family	Alcohol	Metastases	Smoking
-16	3				
4	3				
12	5				
14	3				
19	2				
26	5				
28	4		eGAGeGAG(55.6), eGAAGAG(0), eGAAGAA(16.7)		
34	3				
53	2				
57	7				
58	6				
69	3				
72	5	rcGGrCGU(50), rcGGrCGG(40), rcGGrCGC(0)			
78	3				
90	2				
30	2				

Fig. 79

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DR					
Nucleic Acid	No. of Diversity	Cancer in Family	Alcohol	Metastases	Smoking
95	2			VGUCVGUC(33.2), VGUCVGUU(23.5), VGUUVGUU(42.9)	
101	2				
104	3				
106	2				
112	2				
117	2				
145	2				
152	2				
166	3				
169	2				
179	2				
181	3				
206	2				
217	2				

Fig. 80

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DR	Total	Stomach	Other cancers	All cases Treatment Effect	Stomach Cancer Treatment Effect
Nucleic Acid	No. of Diversity	Total			
-29	2				no adjuvant therapy: pccupccu>pcccpccu, pcccpccc
-23	2				
-15	2				Same curve as DQ_23 pccupccu>pcccpccu, pcccpccc
DQNP19	2				
DQNP21	3		IACGIACC, IACGIACG>IACCIACC		
DQNP25	2				
DQNP27	2			Immunotherapy: vGUAVGUG, vGUGvGUG>vGUAVGUA	
DQNP35	2				
DQNP38	3		agCGaGCG>agCGaGCG		
DQNP47	3				
DQNP48	2				
DQNP49	3				
DQNP57	6				
DQNP62	2		NAACnAAC, NAACnAAU>nAAU		
DQNP72	2				
DQNP77	4		IACCIACG, IACGIACG>IACCIACC		
DQNP78	2		vGUAVGUG, vGUGvGUG> vGUAVGUA		
DQNP91	2				
DQNP93	2				
DQNP94	2				

Fig. 81

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DR	Total			All cases Treatment Effect	Stomach Cancer Treatment Effect
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers	
DQNP118	2				
DQNP135	3				
DQNP140	4				
DQNP147	2				
DQNP150	2				
DQNP154	2				
DQNP169	2				
DQNP191	2				
DQNP210	2				
DQNP213	2				
DQNP215	2				
DQNP218	2				
DQNP235	2				

Fig. 82

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DR	Other cancers	Cancer in Family	Alcohol	Metastases	Smoking
Nucleic Acid	No. of Diversity	Treatment Effect			
-29	2				
-23	2				
-15	2				
DQNP19	2	no adjuvant therapy. nAACnAAC, nAACnAAU> nAAUnAAU			nAACnAAC(54.7), nAACnAAU(59.8), nAAUnAAU(39.1)
DQNP 21	3	no adjuvant therapy. IACCIACG>IACAIACG			
DQNP25	2				
DQNP27	2				
DQNP35	2				
DQNP38	3	Chemotherapy: agCAaGCG>agCGaGCG			
DQNP47	3				
DQNP48	2				
DQNP49	3				
DQNP57	6				
DQNP62	2				
DQNP72	2	The Same curve with DQ19 rCGGrCGG, rCGArCGG>rCGArCGA			rCGArCGA(39.1), rCGrCGG(59.8), rCGGrCGG(54.7)
DQNP77	4	Chemotherapy: rAGGrAGG>rAGArAGG, rAGArAGA			
DQNP78	2				
DQNP91	2			ICUGICUG(39.7), ICUGIUUG(26.8), IUUGIUUG(31.8)	
DQNP93	2				
DQNP94	2				

Fig. 83

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DR		Other cancers	Cancer in Family	Alcohol	Metastases	Smoking
Nucleic Acid	No. of Diversity	Treatment Effect				
DQNP118	2					
DQNP135	3				dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)	
DQNP140	4	no adjuvant therapy: aGCCaGCC>aCGUaGCU immunotherapy: tACCaGCU>tACCaGCC		TACCaGCC(50), tACCaGCU(21.3), tACUaGCU(20.5)		
DQNP147	2				ICUCICUC(47.8), ICUCICUU(24.5), ICUUCUU(32.1)	
DQNP150	2					
DQNP154	2					
DQNP169	2				dGACdGAC(32.6), dGACdGAU(27.1), dGAUdGAU(34.4)	
DQNP191	2					
DQNP210	2			ICUCICUC(50), ICUCICUG(18.6), ICUGICUG(22.5)		
DQNP213	2				ICUCICUC(32.6), ICUCICUU(27.1), ICUUCUU(34.4)	
DQNP215	2				LCUUCUU(47.8), ICUGICUU(24.5), ICUGICUG(32.1)	
DQNP218	2					
DQNP235	2					

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Fig. 84

DP		Total			All Cases	Stomach Cancer	Other cancers
Nucleic Acid	No. of Diversity	Total	Stomach	Other cancers	Treatment Effect	Treatment Effect	Treatment Effect
98	2	All same with the survival curve					
107	2	All same with the survival curve					
118	2	All same with the survival curve					
167	2	All same with the survival curve					
179	2	All same with the survival curve					
		All NS					

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Fig. 85

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	M						M	M	M	
28	M						M	M	M	
27	V						V	V	V	
26	L						L	L	L	
25	Q						Q	Q	Q	
24	V						V	V	V	
23	S						S	S	S	
22	A						A	A	A	
21	A						A	A	A	
20	P						P	P	P	
19	Q						R	R	R	
18	T						T	T	T	
17	V						V	V	V	
16	A						A	A	A	
15	L						L	L	L	
14	T						T	T	T	
13	A						A	A	A	
12	L						L	L	L	
11	L						L	L	L	
10	M						M	M	M	
9	V						V	V	V	
8	L						L	L	L	
7	L						L	L	L	
6	T						T	T	T	
5	S						S	S	S	
4	V						V	V	V	
3	V						V	V	V	
2	Q						Q	Q	Q	
1	G						G	G	G	
1	R						R	R	R	
2	A						A	A	A	
3	T						T	T	T	
4	P						P	P	P	
5	E						E	E	E	
6	N						N	N	N	
7	Y						Y	Y	Y	
8	L	V					L or V	L or V	L or V	
9	F	H	Y				()	()	()	DP8 LV and DP F
10	Q						Q	Q	Q	
11	G	L					G or L	G or L	G or L	
12	R						R	R	R	
13	Q						Q	Q	Q	
14	E						E	E	E	
15	C						C	C	C	
16	Y						Y	Y	Y	
17	A						A	A	A	
18	F						F	F	F	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	Q						Q	Q	Q	
23	R						R	R	R	
24	F						F	F	F	
25	L						L	L	L	
26	E						E	E	E	
27	R						R	R	R	
28	Y						Y	Y	Y	

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Fig. 86

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	I						I	I	I	
30	Y						Y	Y	Y	
31	N						N	N	N	
32	R						R	R	R	
33	E						E	E	E	
34	E						E	E	E	
35	F	L	Y				()	()	()	
36	A	V					A or V	A or V	AV	
37	R						R	R	R	
38	F						F	F	F	
39	D						D	D	D	
40	S						S	S	S	
41	D						D	D	D	
42	V						V	V	V	
43	G						G	G	G	
44	E						E	E	E	
45	F						F	F	F	
46	R						R	R	R	
47	A						A	A	A	
48	V						V	V	V	
49	T						T	T	T	
50	E						E	E	E	
51	L						L	L	L	
52	G						G	G	G	
53	R						R	R	R	
54	P						P	P	P	
55	A	D	E				AD	()	()	
56	A	E					()	()	()	
57	D	E					()	DE	()	
58	Y						Y	Y	Y	
59	W						W	W	W	
60	N						N	N	N	
61	S						S	S	S	
62	Q						Q	Q	Q	
63	K						K	K	K	
64	D						D	D	D	
65	F	I	L				IL	I or L	I or L	
66	L						L	L	L	
67	E						E	E	E	
68	E						E	E	E	
69	E	K					EK	E or K	E or K	
70	R						R	R	R	
71	A						A	A	A	
72	V						V	V	V	
73	P						P	P	P	
74	D						D	D	D	
75	R						R	R	R	
76	I	M	V				()	()	IM	
77	C						C	C	C	
78	R						R	R	R	
79	H						H	H	H	
80	N						N	N	N	
81	Y						Y	Y	Y	
82	E						E	E	E	
83	L						L	L	L	
84	D	G					()	DG	()	
85	E	G					()	EG	()	

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Fig. 87

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
86	A	P					()	()	()	
87	M	V					()	MV	()	
88	T						T	T	T	
89	L						L	L	L	
90	Q						Q	Q	Q	
91	R						R	R	R	
92	R						R	R	R	
93	V						V	V	V	
94	Q						Q	Q	Q	
95	P						P	P	P	
96	K	R					()	()	()	
97	V						V	V	V	
98	N						N	N	N	
99	V						V	V	V	
100	S						S	S	S	
101	P						P	P	P	
102	S						S	S	S	
103	K						K	K	K	
104	K						K	K	K	
105	G						G	G	G	
106	P						P	P	P	
107	L						L	L	L	
108	Q						Q	Q	Q	
109	H						H	H	H	
110	H						H	H	H	
111	N						N	N	N	
112	L						L	L	L	
113	L						L	L	L	
114	V						V	V	V	
115	C						C	C	C	
116	H						H	H	H	
117	V						V	V	V	
118	T						T	T	T	
119	D						D	D	D	
120	F						F	F	F	
121	Y						Y	Y	Y	
122	P						P	P	P	
123	G						G	G	G	
124	S						S	S	S	
125	I						I	I	I	
126	Q						Q	Q	Q	
127	V						V	V	V	
128	R						R	R	R	
129	W						W	W	W	
130	F						F	F	F	
131	L						L	L	L	
132	N						N	N	N	
133	G						G	G	G	
134	Q						Q	Q	Q	
135	E						E	E	E	
136	E						E	E	E	
137	T						T	T	T	
138	A						A	A	A	
139	G						G	G	G	
140	V						V	V	V	
141	V						V	V	V	
142	S						S	S	S	
143	T						T	T	T	
144	N						N	N	N	

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Fig. 88

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
145	L						L	L	L	
146	I						I	I	I	
147	R						R	R	R	
148	N						N	N	N	
149	G						G	G	G	
150	D						D	D	D	
151	W						W	W	W	
152	T						T	T	T	
153	F						F	F	F	
154	Q						Q	Q	Q	
155	I						I	I	I	
156	L						L	L	L	
157	V						V	V	V	
158	M						M	M	M	
159	L						L	L	L	
160	E						E	E	E	
161	M						M	M	M	
162	T						T	T	T	
163	P						P	P	P	
164	Q						Q	Q	Q	
165	Q						Q	Q	Q	
166	G						G	G	G	
167	D						D	D	D	
168	V						V	V	V	
169	Y						Y	Y	Y	
170	I	T					I	I	I	
171	C						C	C	C	
172	Q						Q	Q	Q	
173	V						V	V	V	
174	E						E	E	E	
175	H						H	H	H	
176	T						T	T	T	
177	S						S	S	S	
178	L	M					LM	I	I	
179	D						D	D	D	
180	S						S	S	S	
181	P						P	P	P	
182	V						V	V	V	
183	T						T	T	T	
184	V						V	V	V	
185	E						E	E	E	
186	W						W	W	W	
187	K						K	K	K	
188	A						A	A	A	
189	Q						Q	Q	Q	
190	S						S	S	S	
191	D						D	D	D	
192	S						S	S	S	
193	A						A	A	A	
194	R						R	R	R	
195	S						S	S	S	
196	K						K	K	K	
197	T						T	T	T	
198	L						L	L	L	
199	T						T	T	T	
200	G						G	G	G	
201	A						A	A	A	
202	G						G	G	G	
203	G						G	G	G	

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Fig. 89

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
204	F						F	F	F	
205	V						V	V	V	
206	L						L	L	L	
207	G						G	G	G	
208	L						L	L	L	
209	I						I	I	I	
210	I						I	I	I	
211	C						C	C	C	
212	G						G	G	G	
213	V						V	V	V	
214	G						G	G	G	
215	I						I	I	I	
216	F						F	F	F	
217	M						M	M	M	
218	H						H	H	H	
219	R						R	R	R	
220	R						R	R	R	
221	S						S	S	S	
222	K						K	K	K	
223	K						K	K	K	
224	V						V	V	V	
225	Q						Q	Q	Q	
226	R						R	R	R	
227	G						G	G	G	
228	S						S	S	S	
229	A						A	A	A	

"or" – expected to be the same antigen

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Fig. 90

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
32	M						M	M	M	
31	S						S	S	S	
30	W						W	W	W	
29	K						K	K	K	
28	K						K	K	K	
27	A	S					()	()	()	
26	L						L	L	L	
25	R						R	R	R	
24	I						I	I	I	
23	P						P	P	P	
22	G						G	G	G	
21	D	G					GG	()	GG	
20	L						L	L	L	
19	R						R	R	R	
18	A	V					()	()	()	
17	A						A	A	A	
16	T						T	T	T	
15	V						V	V	V	
14	T						T	T	T	
13	L						L	L	L	
12	M						M	M	M	
11	L						L	L	L	
10	A	S					()	()	()	
9	I	M					()	()	()	
8	L						L	L	L	
7	S						S	S	S	
6	S	T					TT	()	TT	
5	L	P	S				()	()	PP	
4	L	V					VV	()	VV	
3	A						A	A	A	
2	E						E	E	E	
1	G						G	G	G	
1	R						R	R	R	
2	D						D	D	D	
3	P	S					SS	PS	P or S	
4	P						P	P	P	
5	E						E	E	E	
6	D						D	D	D	
7	F						F	F	F	
8	V						V	V	V	
9	F	L	Y				()	LY	YY	DQ3 PS is same as DQ8 L
10	Q						Q	Q	Q	
11	F						F	F	F	
12	K						K	K	K	
13	A	G					()	AA	GG	
14	L	M					L or M	L or M	LM	
15	C						C	C	C	
16	Y						Y	Y	Y	
17	F						F	F	F	
18	T						T	T	T	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	E						E	E	E	
23	L	R					LR	L or R	RR	
24	V						V	V	V	
25	R						R	R	R	
26	G	L	Y				()	()	()	
27	V						V	V	V	

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Fig. 91

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
28	S	T					S or T	S or T	S or T	
29	R						R	R	R	
30	H	S	Y				HH	()	HY	
31	I						I	I	I	
32	Y						Y	Y	Y	
33	N						N	N	N	
34	R						R	R	R	
35	E						E	E	E	
36	E						E	E	E	
37	D	I	Y				YY	DY	()	DQ28 ST is same as DQ37I
38	A	V					A or V	A or V	A or V	
39	R						R	R	R	
40	F						F	F	F	
41	D						D	D	D	
42	S						S	S	S	
43	D						D	D	D	
44	V						V	V	V	
45	E	G					E or G	EG	E or G	
46	E	V					()	()	()	DQ28 ST is same as DQ46VE
47	F	Y					()	()	()	DQ28 ST is same as DQ47FY
48	R						R	R	R	
49	A						A	A	A	
50	V						V	V	V	
51	T						T	T	T	
52	L	P					()	()	()	DQ28 ST is same as DQ52PL
53	L	Q					LL	L or Q	L or Q	
54	G						G	G	G	
55	L	P	R				P or R	P or R	P or R	DQ28 ST is same as DQ55L
56	L	P					LP	PP	L or P	
57	A	D	S	V			()	()	AA	
58	A						A	A	A	
59	E						E	E	E	
60	Y						Y	Y	Y	
61	W						W	W	W	
62	N						N	N	N	
63	S						S	S	S	
64	Q						Q	Q	Q	
65	K						K	K	K	
66	D	E					DE	DE	EE	
67	I	V					IV	IV	VV	
68	L						L	L	L	
69	E						E	E	E	
70	E	G	R				()	()	()	
71	A	D	K	T			()	()	AT	
72	R						R	R	R	
73	A						A	A	A	
74	A	E	S				ES	()	ES	
75	L	V					LV	()	()	
76	D						D	D	D	
77	R	T					()	()	RT	
78	V						V	V	V	
79	C						C	C	C	
80	R						R	R	R	
81	H						H	H	H	
82	N						N	N	N	
83	Y						Y	Y	Y	
84	E	Q					QQ	()	QQ	
85	L	V					LL	()	()	
86	A	E	G				()	()	EG	

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Fig. 92

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
87	F	L	Y				FY	()	LY	
88	R						R	R	R	
89	G	T					TT	()	()	
90	I	T					TT	()	()	
91	L						L	L	L	
92	Q						Q	Q	Q	
93	R						R	R	R	
94	R						R	R	R	
95	V						V	V	V	
96	E						E	E	E	
97	P						P	P	P	
98	T						T	T	T	
99	V						V	V	V	
100	T						T	T	T	
101	I						I	I	I	
102	S						S	S	S	
103	P						P	P	P	
104	S						S	S	S	
105	R						R	R	R	
106	T						T	T	T	
107	E						E	E	E	
108	A						A	A	A	
109	L						L	L	L	
110	N						N	N	N	
111	H						H	H	H	
112	H						H	H	H	
113	N						N	N	N	
114	L						L	L	L	
115	L						L	L	L	
116	I	V					()	()	IV	
117	C						C	C	C	
118	S						S	S	S	
119	V						V	V	V	
120	T						T	T	T	
121	D						D	D	D	
122	F						F	F	F	
123	Y						Y	Y	Y	
124	P						P	P	P	
125	A	G	S				GS	()	()	
126	H	Q					()	HQ	()	
127	I						I	I	I	
128	K						K	K	K	
129	V						V	V	V	
130	Q	R					()	RR	QR	
131	W						W	W	W	
132	F						F	F	F	
133	R						R	R	R	
134	N						N	N	N	
135	D						D	D	D	
136	Q						Q	Q	Q	
137	E						E	E	E	
138	E						E	E	E	
139	T						T	T	T	
140	A	T					TT	()	()	
141	G						G	G	G	
142	V						V	V	V	
143	V						V	V	V	
144	S						S	S	S	
145	T						T	T	T	

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Fig. 93

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
146	P						P	P	P	
147	L						L	L	L	
148	I						I	I	I	
149	T						T	T	T	
150	N						N	N	N	
151	G						G	G	G	
152	D						D	D	D	
153	W						W	W	W	
154	T						T	T	T	
155	F						F	F	F	
156	Q						Q	Q	Q	
157	I						I	I	I	
158	L						L	L	L	
159	V						V	V	V	
160	M						M	M	M	
161	L						L	L	L	
162	E						E	E	E	
163	M						M	M	M	
164	T						T	T	T	
165	P						P	P	P	
166	Q						Q	Q	Q	
167	H	R					()	HH	RR	
168	G						G	G	G	
169	D						D	D	D	
170	V						V	V	V	
171	Y						Y	Y	Y	
172	T						T	T	T	
173	C						C	C	C	
174	H						H	H	H	
175	V						V	V	V	
176	E						E	E	E	
177	H						H	H	H	
178	P						P	P	P	
179	S						S	S	S	
180	L						L	L	L	
181	Q						Q	Q	Q	
182	N	S					NN	()	()	
183	P						P	P	P	
184	I						I	I	I	
185	I	T					II	TT	()	
186	V						V	V	V	
187	E						E	E	E	
188	W						W	W	W	
189	R						R	R	R	
190	A						A	A	A	
191	Q						Q	Q	Q	
192	S						S	S	S	
193	E						E	E	E	
194	S						S	S	S	
195	A						A	A	A	
196	Q						Q	Q	Q	
197	N	S					SS	NS	()	
198	K						K	K	K	
199	M						M	M	M	
200	L						L	L	L	
201	S						S	S	S	
202	G						G	G	G	
203	I	V					()	()	()	
204	G						G	G	G	

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Fig. 94

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
205	G						G	G	G	
206	F						F	F	F	
207	V						V	V	V	
208	L						L	L	L	
209	G						G	G	G	
210	L						L	L	L	
211	I						I	I	I	
212	F						F	F	F	
213	L						L	L	L	
214	G						G	G	G	
215	L						L	L	L	
216	G						G	G	G	
217	L						L	L	L	
218	I						I	I	I	
219	I						I	I	I	
220	H	R					HH	()	()	
221	H	Q					HH	()	()	
222	R						R	R	R	
223	S						S	S	S	
224	Q	R					()	()	QR	
225	K						K	K	K	
226	G						G	G	G	
227	P						P	P	P	
228	Q						Q	Q	Q	
229	G						G	G	G	
230	P						P	P	P	
231	P						P	P	P	
232	P						P	P	P	
233	A						A	A	A	
234	G						G	G	G	
235	L						L	L	L	
236	L						L	L	L	
237	H						H	H	H	

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Fig. 95

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
29	M						M	M	M	
28	V						V	V	V	
27	C						C	C	C	
26	L						L	L	L	
25	K	R					RR	RR	RR	
24	F	L					F or L	F or L	F or L	
23	P						P	P	P	
22	G						G	G	G	
21	G						G	G	G	
20	S						S	S	S	
19	C						C	C	C	
18	M						M	M	M	
17	A	T					AA	AA	AA	
16	A	V					VV	VV	A or V	
15	L						L	L	L	
14	T						T	T	T	
13	V						V	V	V	
12	T						T	T	T	
11	L						L	L	L	
10	M						M	M	M	
9	V						V	V	V	
8	L						L	L	L	
8	S						S	S	S	
6	S						S	S	S	
5	P						P	P	P	
4	L						L	L	L	
3	A						A	A	A	
2	L						L	L	L	
1	A	S					A or S	A or S	AA	
1	G						G	G	G	
2	D						D	D	D	
3	T						T	T	T	
4	Q	R					Q or R	Q or R	QR	
5	P						P	P	P	
6	R						R	R	R	
7	F						F	F	F	
8	L						L	L	L	
9	E	K	W				()	WW	KW	
10	E	Q	Y				YY	()	()	
11	D	G	L	P	S	V	DS	()	DP	
12	K	T					K or T	K or T	K or T	
13	F	G	H	R	S	Y	GH	()	FS	
14	E	K					E or K	E or K	E or K	
15	C						C	C	C	
16	H	Q	Y				()	YY	()	
17	F						F	F	F	
18	F						F	F	F	
19	N						N	N	N	
20	G						G	G	G	
21	T						T	T	T	
22	E						E	E	E	
23	R						R	R	R	
24	V						V	V	V	
25	Q	R					Q or R	Q or R	Q or R	
26	F	L	Y				FL	()	FL	
27	L						L	L	L	
28	D	E	H				()	()	()	
29	R						R	R	R	
30	C	G	H	L	R	Y	()	()	()	

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Fig. 96

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
31	F	I	V				For I	For I	FI	
32	H	Y					HH	()	()	
33	H	N					()	()	HH	
34	Q						Q	Q	Q	
35	E						E	E	E	
36	E						E	E	E	
37	F	L	N	S	Y		()	LY	NS	
38	A	L	V				()	()	VV	
39	R						R	R	R	
40	F	Y					For Y	For Y	FF	
41	D						D	D	D	
42	S						S	S	S	
43	D						D	D	D	
44	V						V	V	V	
45	G						G	G	G	
46	E						E	E	E	
47	F	Y					For Y	For Y	For Y	
48	R						R	R	R	
49	A						A	A	A	
50	V						V	V	V	
51	T						T	T	T	
52	E						E	E	E	
53	L						L	L	L	
54	G						G	G	G	
55	R						R	R	R	
56	P						P	P	P	
57	A	D	S	V			AV	AV	AV	
58	A	E					A or E	A or E	A or E	
59	E						E	E	E	
60	H	S	Y				()	YY	HS	
61	W						W	W	W	
62	N						N	N	N	
63	S						S	S	S	
64	Q						Q	Q	Q	
65	K						K	K	K	
66	D						D	D	D	
67	F	I	L				FF	FI	FL	
68	L						L	L	L	
69	E						E	E	E	
70	D	Q	R				()	DD	()	
71	A	E	K	R			A	A	A	
72	R						R	R	R	
73	A	G					AA	A or G	A or G	
74	A	E	L	Q	R		()	LL	AE	
75	V						V	V	V	
76	D						D	D	D	
77	N	T					N or T	N or T	N or T	
78	V	Y					VV	V or Y	VY	
79	C						C	C	C	
80	R						R	R	R	
81	H						H	H	H	
82	N						N	N	N	
83	Y						Y	Y	Y	
84	G						G	G	G	
85	A	V					A or V	A or V	VV	
86	G	V					VV	GV	GG	
87	E						E	E	E	
88	S						S	S	S	
89	F						F	F	F	

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Fig. 97

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
90	T						T	T	T	
91	V						V	V	V	
92	Q						Q	Q	Q	
93	R						R	R	R	
94	R						R	R	R	
95	V						V	V	V	
96	E	H	Q	Y			EQ	()	()	
97	P						P	P	P	
98	E	K					EK	E or K	EK	
99	V						V	V	V	
100	T						T	T	T	
101	V						V	V	V	
102	Y						Y	Y	Y	
103	P						P	P	P	
104	A	S					AA	A or S	AK	O
105	K						K	K	K	
106	T						T	T	T	
107	Q						Q	Q	Q	
108	P						P	P	P	
109	L						L	L	L	
110	Q						Q	Q	Q	
111	H						H	H	H	
112	H						H	H	H	
113	N						N	N	N	
114	L						L	L	L	
115	L						L	L	L	
116	V						V	V	V	
117	C						C	C	C	
118	S						S	S	S	
119	V						V	V	V	
120	N	S					S or N	NN	SS	
121	F						F	F	F	
122	G						G	G	G	
123	Y						Y	Y	Y	
124	P						P	P	P	
125	G						G	G	G	
126	S						S	S	S	
127	I						I	I	I	
128	E						E	E	E	
129	V						V	V	V	
130	R						R	R	R	
131	W						W	W	W	
132	F						F	F	F	
133	L	R					RR	L or R	RR	
134	N						N	N	N	
135	G						G	G	G	
136	Q						Q	Q	Q	
137	E						E	E	E	
138	E						E	E	E	
139	K						K	K	K	
140	A	T					()	TT	()	
141	G						G	G	G	
142	M	V					VV	M or V	VV	
143	V						V	V	V	
144	S						S	S	S	
145	T						T	T	T	
146	G						G	G	G	
147	L						L	L	L	
148	I						I	I	I	

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Fig. 98

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
149	H	Q					H or Q	HH	HH	
150	N						N	N	N	
151	G						G	G	G	
152	D						D	D	D	
153	W						W	W	W	
154	T						T	T	T	
155	F						F	F	F	
156	Q						Q	Q	Q	
157	T						T	T	T	
158	L						L	L	L	
159	V						V	V	V	
160	M						M	M	M	
161	L						L	L	L	
162	E						E	E	E	
163	T						T	T	T	
164	F	V					()	()	()	
165	P						P	P	P	
166	Q	R					Q or R	Q or R	RR	
167	S						S	S	S	
168	G						G	G	G	
169	E						E	E	E	
170	V						V	V	V	
171	Y						Y	Y	Y	
172	T						T	T	T	
173	C						C	C	C	
174	Q						Q	Q	Q	
175	V						V	V	V	
176	E						E	E	E	
177	H						H	H	H	
178	P						P	P	P	
179	S						S	S	S	
180	L	V					L or V	L or V	L or V	
181	M	T					()	()	()	
182	S						S	S	S	
183	P						P	P	P	
184	L						L	L	L	
185	T						T	T	T	
186	V						V	V	V	
187	E						E	E	E	
188	W						W	W	W	
189	R	S					RR	R or S	R or S	
190	A						A	A	A	
191	R						R	R	R	
192	S						S	S	S	
193	E						E	E	E	
194	S						S	S	S	
195	A						A	A	A	
196	Q						Q	Q	Q	
197	S						S	S	S	
198	K						K	K	K	
199	M						M	M	M	
200	L						L	L	L	
201	S						S	S	S	
202	G						G	G	G	
203	V						V	V	V	
204	G						G	G	G	
205	G						G	G	G	
206	F						F	F	F	
207	V						V	V	V	

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Fig. 99

Position	Diverse Amino Acid						no adjuvant therapy	Chemotherapy	Immunotherapy	
208	L						L	L	L	
209	G						G	G	G	
210	L						L	L	L	
211	L						L	L	L	
212	F						F	F	F	
213	L						L	L	L	
214	G						G	G	G	
215	A						A	A	A	
216	G						G	G	G	
217	L						L	L	L	
218	F						F	F	F	
219	I						I	I	I	
220	Y						Y	Y	Y	
221	F						F	F	F	
222	R						R	R	R	
223	N						N	N	N	
224	Q						Q	Q	Q	
225	K						K	K	K	
226	G						G	G	G	
227	H						H	H	H	
228	S						S	S	S	
229	G						G	G	G	
230	L						L	L	L	
231	P	Q					P or Q	P or Q	QQ	
232	P						P	P	P	
233	R	T					R or T	R or T	R or T	
234	G						G	G	G	
235	F						F	F	F	
236	L						L	L	L	
237	S						S	S	S	

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Fig. 100

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
29	M					M
28	M					M
27	V					V
26	L					L
25	Q					Q
24	V					V
23	S					S
22	A					A
21	A					A
20	P					P
19	R					R
18	T					T
17	V					V
16	A					A
15	L					L
14	T					T
13	A					A
12	L					L
11	L					L
10	M					M
9	V					V
8	L					L
7	L					L
6	T					T
5	S					S
4	V					V
3	V					V
2	Q					Q
1	G					G
1	R					R
2	A					A
3	T					T
4	P					P
5	E					E
6	N					N
7	Y					Y
8	L	V				()
9	F	H	Y			()
10	Q					Q
11	G	L				()
12	R					R
13	Q					Q
14	E					E
15	C					C
16	Y					Y
17	A					A
18	F					F
19	N					N
20	G					G
21	T					T
22	Q					Q
23	R					R
24	F					F
25	L					L
26	E					E
27	R					R
28	Y					Y
29	I					I
30	Y					Y

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Fig. 101

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
31	N					N
32	R					R
33	E					E
34	E					E
35	F	L	Y			Q
36	A	V				Q
37	R					R
38	F					F
39	D					D
40	S					S
41	D					D
42	V					V
43	G					G
44	E					E
45	F					F
46	R					R
47	A					A
48	V					V
49	T					T
50	E					E
51	L					L
52	G					G
53	R					R
54	P					P
55	A	D	E			AA
56	A	E				Q
57	D	E				Q
58	Y					Y
59	W					W
60	N					N
61	S					S
62	Q					Q
63	K					K
64	D					D
65	F	I	L			Q
66	L					L
67	E					E
68	E					E
69	E	K				Q
70	R					R
71	A					A
72	V					V
73	P					P
74	D					D
75	R					R
76	I	M	V			Q
77	C					C
78	R					R
79	H					H
80	N					N
81	Y					Y
82	E					E
83	L					L
84	D	G				Q
85	E	G				Q
86	A	P				Q
87	M	V				Q
88	T					T
89	L					L

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Fig. 102

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
90	Q					Q
91	R					R
92	R					R
93	V					V
94	Q					Q
95	P					P
96	K	R				Q
97	V					V
98	N					N
99	V					V
100	S					S
101	P					P
102	S					S
103	K					K
104	K					K
105	G					G
106	P					P
107	L					L
108	Q					Q
109	H					H
110	H					H
111	N					N
112	L					L
113	L					L
114	V					V
115	C					C
116	H					H
117	V					V
118	T					T
119	D					D
120	F					F
121	Y					Y
122	P					P
123	G					G
124	S					S
125	I					I
126	Q					Q
127	V					V
128	R					R
129	W					W
130	F					F
131	L					L
132	N					N
133	G					G
134	Q					Q
135	E					E
136	E					E
137	T					T
138	A					A
139	G					G
140	V					V
141	V					V
142	S					S
143	T					T
144	N					N
145	L					L
146	I					I
147	R					R
148	N					N

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Fig. 103

Position	Diverse Amino Acid					Amino Acid Configuration to Inhibit Metastases
149	G					G
150	D					D
151	W					W
152	T					T
153	F					F
154	Q					Q
155	I					I
156	L					L
157	V					V
158	M					M
159	L					L
160	E					E
161	M					M
162	T					T
163	P					P
164	Q					Q
165	Q					Q
166	G					G
167	D					D
168	V					V
169	Y					Y
170	I	T				I
171	C					C
172	Q					Q
173	V					V
174	E					E
175	H					H
176	T					T
177	S					S
178	I	M				I
179	D					D
180	S					S
181	P					P
182	V					V
183	T					T
184	V					V
185	E					E
186	W					W
187	K					K
188	A					A
189	Q					Q
190	S					S
191	D					D
192	S					S
193	A					A
194	R					R
195	S					S
196	K					K
197	T					T
198	L					L
199	T					T
200	G					G
201	A					A
202	G					G
203	G					G
204	F					F
205	V					V
206	L					L
207	G					G

U.S. Patent Application No. 10/681,352
Amendment After Allowance dated August 20, 2009
Reply to Notice to File Corrected Application Papers of August 11, 2009
Replacement Sheet

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Fig. 104

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
208	L						L
209	I						I
210	I						I
211	C						C
212	G						G
213	V						V
214	G						G
215	I						I
216	F						F
217	M						M
218	H						H
219	R						R
220	R						R
221	S						S
222	K						K
223	K						K
224	V						V
225	Q						Q
226	R						R
227	G						G
228	S						S
229	A						A

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Fig. 105

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
32	M						M
31	S						S
30	W						W
29	K						K
28	K						K
27	A	S					Q
26	L						L
25	R						R
24	I						I
23	P						P
22	G						G
21	D	G					Q
20	L						L
19	R						R
18	A	V					Q
17	A						A
16	T						T
15	V						V
14	T						T
13	L						L
12	M						M
11	L						L
10	A	S					Q
9	I	M					Q
8	L						L
7	S						S
6	S	T					Q
5	L	P	S				Q
4	L	V					Q
3	A						A
2	E						E
1	G						G
1	R						R
2	D						D
3	P	S					Q
4	P						P
5	E						E
6	D						D
7	F						F
8	V						V
9	F	L	Y				Q
10	Q						Q
11	F						F
12	K						K
13	A	G					Q
14	L	M					LM
15	C						C
16	Y						Y
17	F						F
18	T						T
19	N						N
20	G						G
21	T						T
22	E						E
23	L	R					Q
24	V						V
25	R						R
26	G	L	Y				Q
27	V						V

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Fig. 106

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
28	S	T					()
29	R						R
30	H	S	Y				()
31	I						I
32	Y						Y
33	N						N
34	R						R
35	E						E
36	E						E
37	D	I	Y				()
38	A	V					()
39	R						R
40	F						F
41	D						D
42	S						S
43	D						D
44	V						V
45	E	G					()
46	E	V					()
47	F	Y					()
48	R						R
49	A						A
50	V						V
51	T						T
52	L	P					()
53	L	Q					()
54	G						G
55	L	P	R				()
56	L	P					()
57	A	D	S	V			()
58	A						A
59	E						E
60	Y						Y
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D	E					()
67	I	V					()
68	L						L
69	E						E
70	E	G	R				()
71	A	D	K	T			()
72	R						R
73	A						A
74	A	E	S				()
75	L	V					()
76	D						D
77	R	T					RT
78	V						V
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	E	Q					()
85	L	V					()
86	A	E	G				()

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Fig. 107

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
87	F	L	Y				LL
88	R						R
89	G	T					O
90	I	T					O
91	L						L
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E						E
97	P						P
98	T						T
99	V						V
100	T						T
101	I						I
102	S						S
103	P						P
104	S						S
105	R						R
106	T						T
107	E						E
108	A						A
109	L						L
110	N						N
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	I	V					IV
117	C						C
118	S						S
119	V						V
120	T						T
121	D						D
122	F						F
123	Y						Y
124	P						P
125	A	G	S				AA
126	H	Q					O
127	I						I
128	K						K
129	V						V
130	Q	R					O
131	W						W
132	F						F
133	R						R
134	N						N
135	D						D
136	Q						Q
137	E						E
138	E						E
139	T						T
140	A	T					O
141	G						G
142	V						V
143	V						V
144	S						S
145	T						T

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Fig. 108

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
146	P						P
147	L						L
148	I						I
149	R						R
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	I						I
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	M						M
164	T						T
165	P						P
166	Q						Q
167	H	R					H
168	G						G
169	D						D
170	V						V
171	Y						Y
172	T						T
173	C						C
174	H						H
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L						L
181	Q						Q
182	N	S					N
183	P						P
184	I						I
185	I	T					I
186	V						V
187	E						E
188	W						W
189	R						R
190	A						A
191	Q						Q
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	N	S					N
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	I	V					I
204	G						G

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Fig. 109

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
205	G						G
206	F						F
207	V						V
208	L						L
209	G						G
210	L						L
211	I						I
212	F						F
213	L						L
214	G						G
215	L						L
216	G						G
217	L						L
218	I						I
219	I						I
220	H	R					I
221	H	Q					I
222	R						R
223	S						S
224	Q	R					QR
225	K						K
226	G						G
227	P						P
228	Q						Q
229	G						G
230	P						P
231	P						P
232	P						P
233	A						A
234	G						G
235	L						L
236	L						L
237	H						H

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Fig. 110

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
29	M						M
28	V						V
27	C						C
26	L						L
25	K	R					Q
24	F	L					LL
23	P						P
22	G						G
21	G						G
20	S						S
19	C						C
18	M						M
17	A	T					Q
16	A	V					Q
15	L						L
14	T						T
13	V						V
12	T						T
11	L						L
10	M						M
9	V						V
8	L						L
8	S						S
6	S						S
5	P						P
4	L						L
3	A						A
2	L						L
1	A	S					Q
1	G						G
2	D						D
3	T						T
4	Q	R					Q
5	P						P
6	R						R
7	F						F
8	L						L
9	E	K	W				Q
10	E	Q	Y				Q
11	D	G	L	P	S	V	Q
12	K	T					Q
13	F	G	H	R	S	Y	Q
14	E	K					Q
15	C						C
16	H	Q	Y				Q
17	F						F
18	F						F
19	N						N
20	G						G
21	T						T
22	E						E
23	R						R
24	V						V
25	Q	R					Q
26	F	L	Y				Q
27	L						L
28	D	E	H				Q
29	R						R
30	C	G	H	L	R	Y	Q

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Fig. 111

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
31	F	I	V				I
32	H	Y					I
33	H	N					I
34	Q						Q
35	E						E
36	E						E
37	F	L	N	S	Y		I
38	A	L	V				I
39	R						R
40	F	Y					I
41	D						D
42	S						S
43	D						D
44	V						V
45	G						G
46	E						E
47	F	Y					I
48	R						R
49	A						A
50	V						V
51	T						T
52	E						E
53	L						L
54	G						G
55	R						R
56	P						P
57	A	D	S	V			I
58	A	E					I
59	E						E
60	H	S	Y				I
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D						D
67	F	I	L				I
68	L						L
69	E						E
70	D	Q	R				I
71	A	E	K	R			I
72	R						R
73	A	G					I
74	A	E	L	Q	R		I
75	V						V
76	D						D
77	N	T					I
78	V	Y					I
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	G						G
85	A	V					I
86	G	V					I
87	E						E
88	S						S
89	F						F

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Fig. 112

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
90	T						T
91	V						V
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E	H	Q	Y			Q
97	P						P
98	E	K					Q
99	V						V
100	T						T
101	V						V
102	Y						Y
103	P						P
104	A	S					Q
105	K						K
106	T						T
107	Q						Q
108	P						P
109	L						L
110	Q						Q
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	V						V
117	C						C
118	S						S
119	V						V
120	N	S					Q
121	F						F
122	G						G
123	Y						Y
124	P						P
125	G						G
126	S						S
127	I						I
128	E						E
129	V						V
130	R						R
131	W						W
132	F						F
133	L	R					Q
134	N						N
135	G						G
136	Q						Q
137	E						E
138	E						E
139	K						K
140	A	T					Q
141	G						G
142	M	V					Q
143	V						V
144	S						S
145	T						T
146	G						G
147	L						L
148	I						I

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Fig. 113

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
149	H	Q					I
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	T						T
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	T						T
164	F	V					I
165	P						P
166	Q	R					I
167	S						S
168	G						G
169	E						E
170	V						V
171	Y						Y
172	T						T
173	C						C
174	Q						Q
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L	V					I
181	M	T					I
182	S						S
183	P						P
184	L						L
185	T						T
186	V						V
187	E						E
188	W						W
189	R	S					I
190	A						A
191	R						R
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	S						S
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	V						V
204	G						G
205	G						Q
206	F						F
207	V						V

U.S. Patent Application No. 10/681,352
Amendment After Allowance dated August 20, 2009
Reply to Notice to File Corrected Application Papers of August 11, 2009
Replacement Sheet

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Fig. 114

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases
208	L						L
209	G						G
210	L						L
211	L						L
212	F						F
213	L						L
214	G						G
215	A						A
216	G						G
217	L						L
218	F						F
219	I						I
220	Y						Y
221	F						F
222	R						R
223	N						N
224	Q						Q
225	K						K
226	G						G
227	H						H
228	S						S
229	G						G
230	L						L
231	P	Q					Q
232	P						P
233	R	T					T
234	G						G
235	F						F
236	L						L
237	S						S

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Fig. 115

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
29	M						M
28	M						M
27	V						V
26	L						L
25	Q						Q
24	V						V
23	S						S
22	A						A
21	A						A
20	P						P
19	R						R
18	T						T
17	V						V
16	A						A
15	L						L
14	T						T
13	A						A
12	L						L
11	L						L
10	M						M
9	V						V
8	L						L
7	L						L
6	T						T
5	S						S
4	V						V
3	V						V
2	Q						Q
1	G						G
1	R						R
2	A						A
3	T						T
4	P						P
5	E						E
6	N						N
7	Y						Y
8	L	V					LL
9	F	H	Y				U
10	Q						Q
11	G	L					LL
12	R						R
13	Q						Q
14	E						E
15	C						C
16	Y						Y
17	A						A
18	F						F
19	N						N
20	G						G
21	T						T
22	Q						Q
23	R						R
24	F						F
25	L						L
26	E						E
27	R						R
28	Y						Y
29	I						I
30	Y						Y

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Fig. 116

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
31	N						N
32	R						R
33	E						E
34	E						E
35	F	L	Y				Q
36	A	V					Q
37	R						R
38	F						F
39	D						D
40	S						S
41	D						D
42	V						V
43	G						G
44	E						E
45	F						F
46	R						R
47	A						A
48	V						V
49	T						T
50	E						E
51	L						L
52	G						G
53	R						R
54	P						P
55	A	D	E				Q
56	A	E					Q
57	D	E					EE
58	Y						Y
59	W						W
60	N						N
61	S						S
62	Q						Q
63	K						K
64	D						D
65	F	I	L				Q
66	L						L
67	E						E
68	E						E
69	E	K					Q
70	R						R
71	A						A
72	V						V
73	P						P
74	D						D
75	R						R
76	I	M	V				H
77	C						C
78	R						R
79	H						H
80	N						N
81	Y						Y
82	E						E
83	L						L
84	D	G					GG
85	E	G					GG
86	A	P					MM
87	M	V					MM
88	T						T
89	L						L

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Fig. 117

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
90	Q						Q
91	R						R
92	R						R
93	V						V
94	Q						Q
95	P						P
96	K	R					()
97	V						V
98	N						N
99	V						V
100	S						S
101	P						P
102	S						S
103	K						K
104	K						K
105	G						G
106	P						P
107	L						L
108	Q						Q
109	H						H
110	H						H
111	N						N
112	L						L
113	L						L
114	V						V
115	C						C
116	H						H
117	V						V
118	T						T
119	D						D
120	F						F
121	Y						Y
122	P						P
123	G						G
124	S						S
125	I						I
126	Q						Q
127	V						V
128	R						R
129	W						W
130	F						F
131	L						L
132	N						N
133	G						G
134	Q						Q
135	E						E
136	E						E
137	T						T
138	A						A
139	G						G
140	V						V
141	V						V
142	S						S
143	T						T
144	N						N
145	L						L
146	I						I
147	R						R
148	N						N

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Fig. 118

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
149	G						G
150	D						D
151	W						W
152	T						T
153	F						F
154	Q						Q
155	I						I
156	L						L
157	V						V
158	M						M
159	L						L
160	E						E
161	M						M
162	T						T
163	P						P
164	Q						Q
165	Q						Q
166	G						G
167	D						D
168	V						V
169	Y						Y
170	I	T					(I)
171	C						C
172	Q						Q
173	V						V
174	E						E
175	H						H
176	T						T
177	S						S
178	L	M					(L)
179	D						D
180	S						S
181	P						P
182	V						V
183	T						T
184	V						V
185	E						E
186	W						W
187	K						K
188	A						A
189	Q						Q
190	S						S
191	D						D
192	S						S
193	A						A
194	R						R
195	S						S
196	K						K
197	T						T
198	L						L
199	T						T
200	G						G
201	A						A
202	G						G
203	G						G
204	F						F
205	V						V
206	L						L
207	G						G

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Fig. 119

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
208	L						L
209	I						I
210	I						I
211	C						C
212	G						G
213	V						V
214	G						G
215	I						I
216	F						F
217	M						M
218	H						H
219	R						R
220	R						R
221	S						S
222	K						K
223	K						K
224	V						V
225	Q						Q
226	R						R
227	G						G
228	S						S
229	A						A

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Fig. 120

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
32	M						M
31	S						S
30	W						W
29	K						K
28	K						K
27	A	S					()
26	L						L
25	R						R
24	I						I
23	P						P
22	G						G
21	D	G					()
20	L						L
19	R						R
18	A	V					()
17	A						A
16	T						T
15	V						V
14	T						T
13	L						L
12	M						M
11	L						L
10	A	S					()
9	I	M					()
8	L						L
7	S						S
6	S	T					()
5	L	P	S				()
4	L	V					()
3	A						A
2	E						E
1	G						G
1	R						R
2	D						D
3	P	S					()
4	P						P
5	E						E
6	D						D
7	F						F
8	V						V
9	F	L	Y				()
10	Q						Q
11	F						F
12	K						K
13	A	G					()
14	L	M					()
15	C						C
16	Y						Y
17	F						F
18	T						T
19	N						N
20	G						G
21	T						T
22	E						E
23	L	R					()
24	V						V
25	R						R
26	G	L	Y				()
27	V						V

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Fig. 121

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
28	S	T					S or ()
29	R						R
30	H	S	Y				()
31	I						I
32	Y						Y
33	N						N
34	R						R
35	E						E
36	E						E
37	D	I	Y				()
38	A	V					()
39	R						R
40	F						F
41	D						D
42	S						S
43	D						D
44	V						V
45	E	G					()
46	E	V					()
47	F	Y					()
48	R						R
49	A						A
50	V						V
51	T						T
52	L	P					()
53	L	Q					()
54	G						G
55	L	P	R				()
56	L	P					()
57	A	D	S	V			()
58	A						A
59	E						E
60	Y						Y
61	W						W
62	N						N
63	S						S
64	Q						Q
65	K						K
66	D	E					()
67	I	V					()
68	L						L
69	E						E
70	E	G	R				()
71	A	D	K	T			()
72	R						R
73	A						A
74	A	E	S				()
75	L	V					()
76	D						D
77	R	T					()
78	V						V
79	C						C
80	R						R
81	H						H
82	N						N
83	Y						Y
84	E	Q					()
85	L	V					()
86	A	E	G				EG

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Fig. 122

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
87	F	L	Y				()
88	R						R
89	G	T					()
90	I	T					()
91	L						L
92	Q						Q
93	R						R
94	R						R
95	V						V
96	E						E
97	P						P
98	T						T
99	V						V
100	T						T
101	I						I
102	S						S
103	P						P
104	S						S
105	R						R
106	T						T
107	E						E
108	A						A
109	L						L
110	N						N
111	H						H
112	H						H
113	N						N
114	L						L
115	L						L
116	I	V					()
117	C						C
118	S						S
119	V						V
120	T						T
121	D						D
122	F						F
123	Y						Y
124	P						P
125	A	G	S				()
126	H	Q					()
127	I						I
128	K						K
129	V						V
130	Q	R					()
131	W						W
132	F						F
133	R						R
134	N						N
135	D						D
136	Q						Q
137	E						E
138	E						E
139	T						T
140	A	T					()
141	G						G
142	V						V
143	V						V
144	S						S
145	T						T

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Fig. 123

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
146	P						P
147	L						L
148	I						I
149	R						R
150	N						N
151	G						G
152	D						D
153	W						W
154	T						T
155	F						F
156	Q						Q
157	I						I
158	L						L
159	V						V
160	M						M
161	L						L
162	E						E
163	M						M
164	T						T
165	P						P
166	Q						Q
167	H	R					()
168	G						G
169	D						D
170	V						V
171	Y						Y
172	T						T
173	C						C
174	H						H
175	V						V
176	E						E
177	H						H
178	P						P
179	S						S
180	L						L
181	Q						Q
182	N	S					()
183	P						P
184	I						I
185	I	T					()
186	V						V
187	E						E
188	W						W
189	R						R
190	A						A
191	Q						Q
192	S						S
193	E						E
194	S						S
195	A						A
196	Q						Q
197	N	S					()
198	K						K
199	M						M
200	L						L
201	S						S
202	G						G
203	I	V					()
204	G						G

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Fig. 124

Position	Diverse Amino Acid						Amino Acid Configuration With Less Tendency to Malignancy
205	G						G
206	F						F
207	V						V
208	L						L
209	G						G
210	L						L
211	I						I
212	F						F
213	L						L
214	G						G
215	L						L
216	G						G
217	L						L
218	I						I
219	I						I
220	H	R					O
221	H	Q					O
222	R						R
223	S						S
224	Q	R					O
225	K						K
226	G						G
227	P						P
228	Q						Q
229	G						G
230	P						P
231	P						P
232	P						P
233	A						A
234	G						G
235	L						L
236	L						L
237	H						H

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Fig. 125

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
29	M						M	M
28	V						V	V
27	C						C	C
26	L						L	L
25	K	R					()	()
24	F	L					()	()
23	P						P	P
22	G						G	G
21	G						G	G
20	S						S	S
19	C						C	C
18	M						M	M
17	A	T					()	()
16	A	V					()	()
15	L						L	L
14	T						T	T
13	V						V	V
12	T						T	T
11	L						L	L
10	M						M	M
9	V						V	V
8	L						L	L
7	S						S	S
6	S						S	S
5	P						P	P
4	L						L	L
3	A						A	A
2	L						L	L
1	A	S					()	()
1	G						G	G
2	D						D	D
3	T						T	T
4	Q	R					()	()
5	P						P	P
6	R						R	R
7	F						F	F
8	L						L	L
9	E	K	W				()	()
10	E	Q	Y				()	()
11	D	G	L	P	S	V	()	()
12	K	T					()	()
13	F	G	H	R	S	Y	()	FF or GR
14	E	K					()	()
15	C						C	C
16	H	Q	Y				()	YY
17	F						F	F
18	F						F	F
19	N						N	N
20	G						G	G
21	T						T	T
22	E						E	E
23	R						R	R
24	V						V	V
25	Q	R					()	()
26	F	L	Y				()	()
27	L						L	L
28	D	E	H				()	()
29	R						R	R
30	C	G	H	L	R	Y	()	()

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Fig. 126

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
31	F	I	V				()	()
32	H	Y					()	()
33	H	N					()	NN
34	Q						Q	Q
35	E						E	E
36	E						E	E
37	F	L	N	S	Y		()	()
38	A	L	V				()	()
39	R						R	R
40	F	Y					()	()
41	D						D	D
42	S						S	S
43	D						D	D
44	V						V	V
45	G						G	G
46	E						E	E
47	F	Y					()	()
48	R						R	R
49	A						A	A
50	V						V	V
51	T						T	T
52	E						E	E
53	L						L	L
54	G						G	G
55	R						R	R
56	P						P	P
57	A	D	S	V			()	()
58	A	E					()	()
59	E						E	E
60	H	S	Y				()	()
61	W						W	W
62	N						N	N
63	S						S	S
64	Q						Q	Q
65	K						K	K
66	D						D	D
67	F	I	L				()	()
68	L						L	L
69	E						E	E
70	D	Q	R				()	()
71	A	E	K	R			()	()
72	R						R	R
73	A	G					()	()
74	A	E	L	Q	R		()	()
75	V						V	V
76	D						D	D
77	N	T					()	()
78	V	Y					()	()
79	C						C	C
80	R						R	R
81	H						H	H
82	N						N	N
83	Y						Y	Y
84	G						G	G
85	A	V					()	()
86	G	V					()	()
87	E						E	E
88	S						S	S
89	F						F	F

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Fig. 127

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
90	T						T	T
91	V						V	V
92	Q						Q	Q
93	R						R	R
94	R						R	R
95	V						V	V
96	E	H	Q	Y			()	()
97	P						P	P
98	E	K					()	()
99	V						V	V
100	T						T	T
101	V						V	V
102	Y						Y	Y
103	P						P	P
104	A	S					()	()
105	K						K	K
106	T						T	T
107	Q						Q	Q
108	P						P	P
109	L						L	L
110	Q						Q	Q
111	H						H	H
112	H						H	H
113	N						N	N
114	L						L	L
115	L						L	L
116	V						V	V
117	C						C	C
118	S						S	S
119	V						V	V
120	N	S					()	()
121	F						F	F
122	G						G	G
123	Y						Y	Y
124	P						P	P
125	G						G	G
126	S						S	S
127	I						I	I
128	E						E	E
129	V						V	V
130	R						R	R
131	W						W	W
132	F						F	F
133	L	R					()	()
134	N						N	N
135	G						G	G
136	Q						Q	Q
137	E						E	E
138	E						E	E
139	K						K	K
140	A	T					()	()
141	G						G	G
142	M	V					()	()
143	V						V	V
144	S						S	S
145	T						T	T
146	G						G	G
147	L						L	L
148	I						I	I

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Fig. 128

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
149	H	Q					()	()
150	N						N	N
151	G						G	G
152	D						D	D
153	W						W	W
154	T						T	T
155	F						F	F
156	Q						Q	Q
157	T						T	T
158	L						L	L
159	V						V	V
160	M						M	M
161	L						L	L
162	E						E	E
163	T						T	T
164	F	V					()	()
165	P						P	P
166	Q	R					()	()
167	S						S	S
168	G						G	G
169	E						E	E
170	V						V	V
171	Y						Y	Y
172	T						T	T
173	C						C	C
174	Q						Q	Q
175	V						V	V
176	E						E	E
177	H						H	H
178	P						P	P
179	S						S	S
180	L	V					()	()
181	M	T					()	()
182	S						S	S
183	P						P	P
184	L						L	L
185	T						T	T
186	V						V	V
187	E						E	E
188	W						W	W
189	R	S					()	()
190	A						A	A
191	R						R	R
192	S						S	S
193	E						E	E
194	S						S	S
195	A						A	A
196	Q						Q	Q
197	S						S	S
198	K						K	K
199	M						M	M
200	L						L	L
201	S						S	S
202	G						G	G
203	V						V	V
204	G						G	G
205	G						G	G
206	F						F	F
207	V						V	V

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Fig. 129

Position	Diverse Amino Acid						Amino Acid Configuration to Inhibit Metastases	Amino Acid Configuration to Inhibit Metastases
208	L						L	L
209	G						G	G
210	L						L	L
211	L						L	L
212	F						F	F
213	L						L	L
214	G						G	G
215	A						A	A
216	G						G	G
217	L						L	L
218	F						F	F
219	I						I	I
220	Y						Y	Y
221	F						F	F
222	R						R	R
223	N						N	N
224	Q						Q	Q
225	K						K	K
226	G						G	G
227	H						H	H
228	S						S	S
229	G						G	G
230	L						L	L
231	P	Q					()	()
232	P						P	P
233	R	T					()	()
234	G						G	G
235	F						F	F
236	L						L	L
237	S						S	S